

NEWSLETTER

March 1996

THE DOWNHOLE INJECTION PUMP: TECHNOLOGY TRANSFER IN ACTION

David Fite, an independent operator in Shreveport, recently called Bob Baumann, Managing Director of the Central Gulf Region Petroleum Technology Transfer Council (CGR PTTC) to tell Bob about his success with the downhole injection pump.

According to Fite, it started in January of 1995 when Keith Long of CGR PTTC sent him information on Downhole Injection (DHI) Pumps. Eventually, Fite said, he decided to try the DHI pump in a marginal well that had been scheduled for P&A (plugging and abandonment). After talking with the pump's supplier, Clarence Michaels of Envirotech Tools, Fite installed and ran the DHI Pump in a well that previous tests indicated would produce 175,000 mcf of natural gas along with 250 barrels of water per day. Fite fine tuned the test with research from Dr. Andrew Wojtanowicz of LSU's Petroleum Engineering Department, who works with the CGR PTTC Resource Center.

The problem with the well was that water from a deeper zone in the wellbore was channeling into the well's producing zone. Using tests and applications developed by Professor Wojtanowicz, Fite was able to "squeeze" the channel, thereby reducing the extra water. Fite also

changed the mechanical design of the well by reducing the size of the downhole pump from a 2 1/4" insert pump to 1 3/4" working barrel, a more efficient pump mechanism which reduced costs.

Together these technologies reduced the total produced water by 50 percent, or 130 bwpd, while increasing production to 180,000 to 200,000 mcf/day.

Fite was so impressed with the results from his test that he decided to obtain a franchise for the DHI Pump and market it in Louisiana, Arkansas, and Mississippi. His new company will be called ArkLaMiss Envirotech Tools. According to Fite, the pump and associated technology appear to be very well suited for reservoirs where a sand section is divided by shale on top of a good water drive reservoir. He has identified four areas which look like good DHI pump prospects; Louisiana's Hill Sands, Gloyd Sands, and Wilcox Sands; and in Mississippi, the Frio Sands.

Bob Baumann, Managing Director of the CGR PTTC and Senior Fellow at the Center for Energy Studies, says Fite's story is technology transfer at it ought to be. "Until money starts to change hands," he says, "you really don't know if anything has been accomplished."

3-D SEISMIC CONFERENCE

SELLS OUT

The Basin Research Institute of Louisiana State University sponsored a 3-D Seismic Conference on January 11 and 12, 1996, in New Orleans, LA. The Central Gulf Region of the PTTC (CGR PTTC) co-sponsored this event.

The seminar was titled "The Blessing--The Curse." The "curse" is that 3-D seismic techniques generate so much data it is difficult as well as costly to analyze, but the "blessing" is that the payoff is very high for those who can do so. In fact, at the seminar participants said it was getting difficult to find financing for drilling unless 3-D seismic analysis was available.

There were 245 registered participants and the conference was sold out a month before it was held. Bob Chebul from LL&E, who is chair of the CGR PTTC's Producers Advisory Group (PAG), talked about the impact of 3-D Seismic on LL&E lands and production. He said that when using 3-D technology LL&E has enjoyed a greater than 90 percent success rate in drilling wells.

The evaluation forms from the workshop showed that what operators want is case histories. Case histories of projects that worked as well as case histories of those that didn't.

Western Geophysical provided each participant with a video of the conference, and Fairfield Industries sponsored the main reception the first night. The workshop was so well received that another 3-D seismic conference is tentatively slated for September 1996 in Houston, Texas.

CES ELECTRICITY INITIATIVE ELICITS INTEREST

The Center's Electricity Initiative is off to a good start. The objective of the initiative is to objectively and comprehensively discuss the likely implications of restructuring in the electric utility industry for Louisiana.

A draft "Phase One" background report was distributed at the Center's Industry Associates Advisory Council meeting on March 15.

"Restructuring" is a term that is being used to describe changing the regulatory framework of the electric utility industry to encourage more competition among suppliers of electricity. The objective being to lower the price and increase choice for consumers. In many respects it is similar to the "deregulation" movement that transformed aspects of the natural gas and telephone industries in the 1980s.

The Center's Phase One report has three sections. The first surveys the economic, technological and regulatory trends that have created the motivation and momentum for restructuring. The second describes the electric utility industry in Louisiana, and the third analyzes how some key states have responded to the major issues in the restructuring debate.

The report will also be used as background for the Electric Restructuring Seminar Series that the Center is organizing. This effort is aimed at promoting an open and informed discussion of the implications of electric restructuring in Louisiana.

The first meeting in the seminar series will be on April 29. Two papers will be presented and discussed. Douglas Bohi Director of the Energy and Natural Resources Division at Resources for the Future in Washington DC, and former chief economist at the Federal Energy Regulatory Commission (FERC), will give a paper comparing the effects of retail and wholesale wheeling.

Under wholesale wheeling utilities compete for power supplies to wholesale customers (like other utilities or municipalities). Under retail wheeling large electricity users and other groups of users are able to shop directly for power from utility and nonutility suppliers. Professor Andrew Kleit of LSU's Economics Department will discuss Bohi's paper.

The second paper will be given by Karen Palmer, also of Resources for the Future. Palmer will talk about the implications of restructuring for environmental regulation and improvement.

Mike McDaniel of Woodward and Clyde, former Assistant Secretary for Air Quality at the Louisiana Department of Environmental Quality, will discuss Palmer's paper. Both industrial groups and utilities, as well as academics, have expressed considerable interest in the seminar. We anticipate a lively discussion of restructuring issues.

If you have questions about the initiative or seminar, contact David Dismukes at 504/388-4343.

**MARINE BOARD STUDY
RELEASED: CES/MMS
WORKSHOP ON SCHEDULE FOR**

APRIL 15-17

A study of the environmental effects of the explosives used in the removal of offshore oil and gas platforms was released on March 8, 1996, by the Marine Board of the National Research Council. Both Allan Pulsipher of CES and James Coleman, Executive Vice Chancellor of LSU, were members of the study committee.

The study responded to criticisms that current Minerals Management Regulations did not adequately protect the marine environment and discouraged the development of nonexplosive techniques for removing platforms.

The study concluded that explosives were the cheapest, safest and most reliable means for removing platforms, especially larger platforms located in deeper water, and that the existing National Marine Fisheries Service (NMFS) regulations requiring observers at platforms when explosives are used, adequately protected sea turtles and marine mammals. But, the report said, more research was needed on the long-term effects of explosives on Gulf Coast fisheries (especially effects on highly valued fish such as red snapper).

Although the committee concluded no tightening of regulations or prohibition of explosives was warranted, several changes in MMS regulation were recommended.

These changes, other recommendations, and broader aspects of offshore platform removal, such as value of the habitat lost for fish and other marine life when

platforms are removed, will be discussed at a workshop sponsored by the Minerals Management Service, LSU's Center for Energy Studies and LSU's Coastal Marine Institute.

The workshop will be held at the Doubletree Hotel in New Orleans. A program and registration form are enclosed.

independent producers in computer usable form is going to have to go from a diskette format to a CD ROM format in order keep up with revisions and additions to regulations. During the past year the Louisiana Department of Environmental Quality alone has increased the supply of relevant regulations by 100 pages. The new package will, of course, require CD ROM equipment, but users say it is a big improvement over pen and paper. For more information about this software service contact Keith Long at 504/388-4538.

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CGR PTTC FORCED TO GO TO CD ROM TO KEEP UP WITH OIL AND GAS REGULATIONS

The CGR PTTC's popular program which makes Louisiana Production and Environmental Regulations available to